

REMARKS

In this amendment, previously presented claims 19, 20, 22, 24, 25, 27, 28, 29, 34, 37 and 38 are “currently amended”, and previously presented claims 21 and 26 have been cancelled without prejudice or disclaimer. A new claim 39 is submitted to claim protection for subject matter previously recited in Claim 29. The remaining claims are as previously presented.

Applicant respectfully requests reconsideration.

In Section 2 of the Office Action, the Examiner rejected Claims 19-21, 23-25, 38, and 30 to 36 under 35 U.S.C. 102(b) as being anticipated by US 4559934 (to Philipp). Applicant respectfully traverses this rejection.

As the Examiner is no doubt aware, in order to anticipate a claim, a reference must teach all the elements of that claim (see Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631 (Fed. Cir. 1987)). In addition, the reference must show the claimed invention "in as complete detail as is contained in the patent claim" in order to anticipate the claimed invention (see Richardson v. Suzuki Motor Co., Ltd., 868 F.2d 1226, 1236 (Fed. Cir. 1989)).

With this in mind, Applicant notes that Phillip does not, *inter alia*, disclose an orthosis that comprises (a) a compression stocking, (b) a rib of silicone, or (c) a rib which is “formed directly on and thereby attached to” a compression stocking.

With regard to feature (a), Applicant notes that Philipp discloses (see line 26 to 28, Column 4) that the elasticity of the sock 1 is “achieved in the same manner as support stockings”. Support stockings, as the Examiner is no doubt aware, generally function as a means for supporting part of a patient (for example as a means for supporting a patient’s knee or ankle during strenuous activity), whereas compression stockings apply a compressive force to the limb of a patient to assist venous blood flow. Philipp makes no disclosure or suggestion of any sort of compressive function for the sock 1, and as such Applicant respectfully submits that it is clear that the sock disclosed in Philipp is not a compression stocking as claimed.

With regard to feature (b), Applicant notes the Examiner’s acknowledgement in the second paragraph of Page 7, that “Philipp fails to disclose that the rib is of silicone”.

With regard to feature (c), it is clear that in Philipp there is no suggestion or disclosure of the rib having been “formed directly on and thereby attached to” a compression stocking. In actual fact, as Philipp only discloses ribs of ortholen (a high molecular weight polyethylene) or of steel (see lines 40

to 42, Column 4) it would appear to be the case that the rib disclosed in Philipp could only be separately formed from the stocking.

In light of the foregoing, Applicant respectfully submits that currently amended Claim 19 is *not* anticipated under 35 U.S.C. 102(b) by US 4559934 (to Philipp), and as such Applicant respectfully requests that the Examiner now withdraws this objection.

Applicant further respectfully requests that the Examiner withdraws the objections previously raised under 35 U.S.C 102(b) against Claims 20, 23 to 25, 28, and 30 to 36 as these claims depend from a claim (currently amended Claim 19) that is not anticipated by Philipp and hence, if only by virtue of this dependency, are also not anticipated by Philipp.

In Section 4 of the Office Action, the Examiner rejected Claim 22 under 35 U.S.C. 103(a) as being unpatentable over Philipp in view of US6430970 (to Gardon-Mollard et al). Applicant respectfully traverses this rejection.

Applicant notes that Claim 22 is dependent on Claim 19, and that no objection under 35 U.S.C. 103(a) was raised against Claim 19 in the Office Action. Applicant respectfully submits, therefore, that Claim 22 is actually allowable if only by virtue of its dependency on Claim 19 (as currently amended).

In the unlikely event that the Examiner should now consider raising an objection under 35 U.S.C. 103(a) against Claim 19 (as amended), Applicant would respectfully request that the Examiner consider the following observations.

In particular, Applicant would respectfully draw to the Examiner's attention the fact that Gardon-Mollard relates to a stocking construction of the type that is frequently employed as an anti-embolism device, and that such stockings would not in any way function as an orthosis that "resists plantarflexion". As such, it is not immediately clear to Applicant why a skilled person aware of Philipp and Gardon-Mollard would actually consider combining the disclosures in expectation of gaining some advantage. In actual fact, it would appear to Applicant that a skilled person looking to manufacture an orthosis for resisting plantarflexion would be motivated to disregard the disclosure of Gardon-Mollard as being entirely irrelevant for the simple reason that the device disclosed in Gardon-Mollard would not in any way resist plantarflexion.

That said, even if a skilled person were to combine these disclosures, the resulting device would still not include all of the limitations of currently amended Claim 19. In particular the

combination of Philipp and Gardon-Mollard would not suggest or disclose the provision of a rib of silicone, or indeed a rib that is “formed directly on and thereby attached to” a compression stocking.

In fact, Applicant notes that Philipp explicitly states that “Putting on the sock is facilitated when the plate is removed....” (lines 4 and 5, Column 3) and that “The sock is more troublesome to put on when the plate is inserted first” (lines 7 to 9, Column 3).

In other words, Philipp explicitly teaches that the plate should be **removable** from the sock, and hence explicitly *teaches away* from the arrangement specified in currently amended Claim 19.

As such, Applicant would respectfully submit that a rejection of currently amended Claim 19 under 35 U.S.C. 103(a) over Philipp in view of Gardon-Mollard would be improper, and as a consequence of this that currently amended claim 22 is allowable over the combination of Philipp and Gardon-Mollard, if only by virtue of its dependence on allowable Claim 19.

In Section 5 of the Office Action, the Examiner rejected Claims 29 and 38 under 35 U.S.C. 103(a) as being unpatentable over Philipp in view of US Patent No. 5378224 (to Billotti). Applicant respectfully traverses this rejection.

In the first instance, Applicant respectfully submits that Billotti does not disclose a silicone rib. Billotti only discloses “a flexible sheet 32” (line 61, Column 2; line 65, Column 4; line 38, Column 5) of silicone and there is absolutely no suggestion or disclosure of the provision of a rib.

In the second instance, Applicant respectfully disagrees with the Examiner’s assertion that Billotti discloses that the “silicone elastomer utilized is flexible and within the range of hardness of 35 to 80 shore silicone elastomer”.

In actual fact, Billotti discloses a silicone sheet that is “*extremely* flexible and pliable {our emphasis}” (lines 63 and 64, Column 2), and Applicant respectfully submits that an extremely flexible and pliable silicone would be insufficiently robust to support the weight of a foot if utilized in a device for preventing plantarflexion. As such, Applicant submits that an “extremely flexible” sheet would not in fact be of the hardness claimed.

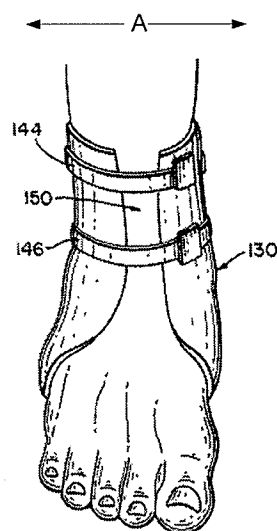
Applicant further notes that none of the embodiments described in Billotti disclose the use of silicone as a means to resist movement of a part of a limb. The silicone disclosed in Billotti is utilized to “prevent abrasive damage” (line 64, column 2) and “to provide a soft, flexible surface contact with the ankle to prevent abrasion” (lines 5 to 7, Column 6).

In contrast to Applicant's device it is the inflatable chambers 134 of Billotti that provide a supportive function. In particular, these chambers are "substantially rigid when inflated so as to render sufficient support with slight flexing under stress" (lines 3 to 5, column 6). In other words, the silicone disclosed in Billotti has no supportive function (that function is provided by the inflatable chambers) and is provided merely as a means to prevent abrasion.

In stark contrast, in Applicant's device the silicone rib functions as a support to resist plantarflexion.

Applicant further notes that whilst Fig. 15 of Billotti does indeed show a device that fits around the ankle of the wearer, it is **not** actually a device "for resisting plantarflexion" as required by Claim 19, from which Claim 29 ultimately depends, and Claim 38.

The device depicted in Fig. 15 of Billotti is an "ankle brace to protect the ankle after surgery or other corrective procedure on the ankle bones" (lines 35 to 37, Column 2) and such devices are designed "...to support a *joint* {our emphasis} of the body so as to permit freedom of movement in a first selected direction while precluding or inhibiting movement in a second selected direction" (lines 7 to 10, Column 1).



In particular, in the configuration depicted in Figs. 15 to 17, the device disclosed in Billotti is configured to resist movement of the foot in a lateral direction A (see adjacent figure). In stark contrast, Applicant's device is configured to resist a tendency of a patient's foot to drop when lifted off the ground or in other words to control movement of the foot in a direction B (as shown in the adjacent figure).

Paragraph [0057] of Applicant's specification explains in detail the differences between those devices that function to resist lateral movement and those devices that function to resist plantarflexion, and Applicant respectfully submits that it is immediately clear that the device disclosed in Figs. 15 to 17 of Billotti would not in any way be suitable for use as a device for resisting plantarflexion.

Applicant respectfully submits, therefore, that the devices disclosed in Philipp and Billotti are intended for entirely different functions, and as such a skilled person would **not** be motivated to apply teachings from Billotti to the Philipp device when seeking to address problematic plantarflexion, nor

would they be motivated to apply teachings from Philipp to the Billotti device when seeking to control lateral movement of the foot.

In addition to the foregoing, Applicant would respectfully remind the Examiner that Philipp explicitly teaches that the plate should be **removable** from the sock, and hence explicitly *teaches away* from the arrangement specified in currently amended Claim 19, on which Claim 29 depends, and Claim 38.

As such, Applicant would respectfully submit that a rejection of currently amended Claim 19 under 35 U.S.C. 103(a) over Philipp in view of Billotti would be improper, and as a consequence of this that currently amended claim 29 is allowable over the combination of Philipp and Billotti, if only by virtue of its dependence on allowable Claim 19. Applicant further respectfully submits that a combination of Billotti and Philipp would not provide an orthosis as claimed in Claim 38, and as a consequence that currently amended Claim 38 is allowable thereover. Applicant therefore respectfully requests that the Examiner now withdraws his previous rejection of Claims 29 and 38.

In Section 6 of the Office Action, the Examiner rejected Claims 27 and 37 under 35 U.S.C. 103(a) as being unpatentable over Philipp. Applicant respectfully traverses this rejection.

Claim 27 is ultimately dependent on currently amended Claim 19, and as explained above Philipp makes no disclosure or suggestion of all of the elements claimed in currently amended Claim 19. As such, Applicant respectfully submits that Claim 27 is not in fact obvious over Phillip and is therefore allowable, if only by virtue of its dependency on currently amended Claim 19.

Regarding independent Claim 37, the Examiner asserts, *inter alia*, that a method that includes the step of “preparing a silicone elastomer having a resilience that is appropriate for resisting the particular degree of plantarflexion experienced by the patient” is obvious over Philipp. Applicant notes the Examiner’s previous assertion in Section 5 of the Office Action that “Philipp fails to disclose that the rib is silicone”, and in the light of this Applicant respectfully submits that Claim 37 cannot in fact be obvious over Philipp when Philipp makes absolutely no disclosure or suggestion of an orthosis with a silicone rib.

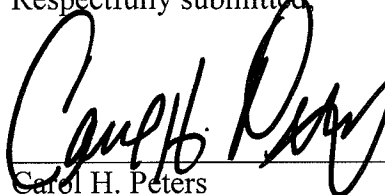
The Examiner further asserts that a method which includes, *inter alia*, the step of “mounting the compression stocking on a foot-shaped anvil” and the step of “applying the silicone elastomer directly to the compression stocking to thereby form a rib that is attached to the compression stocking....” is obvious over Philipp. However, Applicant notes that Philipp makes no disclosure of a

method of manufacture, and as such Applicant respectfully submits that Philip cannot reasonably be said to render the subject matter of Claim 37 obvious.

Applicant respectfully requests, therefore, that the Examiner withdraws the rejections previously made against Claims 27 and 37.

It is respectfully submitted that Applicant has dealt with each and every rejection raised by the Examiner in the Office Action. Applicant believes that the present application is in condition for allowance, and an early and favorable action to that effect is hereby respectfully requested. Should the Examiner have any questions concerning this amendment, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Carol H. Peters", is written over a horizontal line.

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